

Welcome to the Biweekly Restoration Information Update Page. This web site

- Provides current information on wetland and river corridor restoration projects
- Recognizes outstanding restoration projects
- Provides a forum for information sharing

*We welcome the submission of articles and announcements related to your restoration project. Just send your write-up to EPA's contractor at [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com) or mail it to Kathryn Phillips, Biweekly Restoration Update Coordinator, Tetra Tech, Inc., 10306 Eaton Place, Suite 340, Fairfax, VA 22030. We will carefully consider your submission for inclusion in a future update. If your submission is selected, please note that it might be edited for length or style before being posted. Because this web site is meant to be a public forum on restoration information, we cannot post any information that is copyrighted or information that serves or has the appearance to serve as advocating or lobbying for any political, business, or commercial purposes.*

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- [News and Announcements](#) - This section includes up-to-date information on regulatory issues affecting restoration, conference and workshop announcements, and other newsworthy tidbits.
- [Restoration-Related Web Sites](#) - Check out other groups on the Web that are helping in the effort to restore wetlands and river corridors.
- [Information Resources](#) - Books, journals, fact sheets, videos, and other information resources to aid you in your restoration project are provided here.

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## Feature Article

### **Removal of Invasive Reed Helps Restore the Morro Bay Estuary**

A collaborative effort in the Morro Bay estuary is helping to eradicate an invasive reed that threatens the integrity of the watershed's riparian corridor. The giant reed *Arundo donax*, native to the Mediterranean, was introduced in the 1820s to deter erosion in drainage canals. The species has subsequently invaded riparian habitat over a wide area in Southern California. Under optimal conditions, the giant reed can grow more than 5 centimeters per day. Because it self-propagates through stem nodules that break from the parent plant and take root downstream, the reed thrives in highly disturbed areas. The Morro Bay watershed is host to a pioneer population of this intruder that, if left unchecked, would outcompete native vegetation to become the dominant species in the riparian corridor.

The Morro Bay estuary is on California's central coast, about halfway between San Francisco and Los Angeles. The 2,300-acre estuary supports one of the most diverse ecosystems in the state, playing a crucial role as a link in the Pacific flyway. Its rich wetlands provide habitat for many threatened and endangered species of plants and animals, including some found nowhere else in the world. The Morro Bay watershed, which covers 75 square miles, drains into the estuary. The Morro Bay estuary is part of the National Estuary Program.

The purpose of the project was to eradicate several giant reed patches in one of the estuary's tributaries, Chorro Creek. A diverse group of agencies and individuals participated in the project, including the California Army National Guard, Cuesta College, San Luis Obispo Agricultural Department, California Polytechnic State University, Morro Bay National Estuary Program, and the California Conservation Corps. Project participants first removed reeds in the headwaters and then worked their way downstream to prevent plants from taking root in previously undisturbed areas. When removing individual stands, crews worked from the top of the bank toward the creek to minimize impacts on the creek.

Actual removal of the giant reed was a time-consuming process because a single plant can be 100 feet in diameter and be intertwined with native vegetation. To minimize the impact on sensitive habitat and to protect native flora, a certified biologist assisted the reed removal crew. Once removed, the plants were piled for later burning, run through a chipper and left on-site, or placed on dumpsters to be hauled to landfills. When the giant reed debris is dry, it cannot propagate. By the end of the project, the reed removal crews had removed 17 giant reed patches, equivalent to more than 840 cubic feet.

After the removal crew had completed its work, the Agriculture Department followed with herbicide applications. They used precision spray equipment to allow targeting of the giant reed. To ensure herbicide uptake, blade weed-eaters were used to make fresh wounds within 2 minutes of an application. As expected, some dormant sprouts emerged after the initial application and had to be treated again. To control continued resprouting, the Agriculture Department plans to conduct monthly observations and retreatment as necessary until the giant reed is completely eradicated. Completed at a cost of approximately \$30,000, the reed eradication project will have numerous beneficial effects, including improvement of fresh water flow, water quality, and native species habitat. For more information, contact the Morro Bay National Estuary Program, 601 Embarcadero, Suite 11, Morro Bay CA 93442. Phone: (805) 772-3834; e-mail: [mbnep@mbnep.org](mailto:mbnep@mbnep.org).

*If you'd like your project to appear as our next Featured Article, e-mail a short description to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

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## Community-Based Restoration Partnerships

### Montana Wetlands Legacy Celebrates Its First Anniversary

May 1, 2001, marks the first anniversary of a first-of-its kind partnership in the state of Montana that brings together agencies, conservation groups, and interested persons to protect the state's wetlands and riparian areas. The Montana Wetlands Legacy, patterned in part after the highly successful Colorado Wetlands Program, has established a goal of protecting 100,000 acres of wetlands, riparian areas, and associated uplands through voluntary and incentive-based means by May 2005. During its first year, Legacy partners, including the U.S. Fish and Wildlife Service, Ducks Unlimited, and Montana Fish, Wildlife and Parks, have made significant progress toward meeting their first year commitments and have established a project tracking system at the Montana Natural Heritage Program. The Montana Department of Transportation, another partner in the Legacy, will work to locate suitable mitigation sites and integrate wetlands restoration into a watershed context. For more information, contact Lynda Saul, Montana Department of Environmental Quality, at (406) 444-6652 ([lsaul@state.mt.us](mailto:lsaul@state.mt.us)) or Tom Hinz, Montana Fish, Wildlife and Parks, at (406) 444-3248 ([thinz@state.mt.us](mailto:thinz@state.mt.us)).

### Fairfield Marsh Conservation Partnership Endorsed

After a 2-year planning effort that relied heavily on community involvement, the U.S. Fish and Wildlife Service is endorsing the Fairfield Marsh Conservation Partnership as the preferred approach to conservation efforts in the Fairfield Marsh area of south-central Wisconsin. Located near the communities of Baraboo and Portage, the Fairfield Marsh was once an extensive wetland complex near the confluence of the Wisconsin River and the Baraboo River. The marsh was drained in the early 1900s, and today a large portion of the former marsh is used for agricultural purposes.

The Service began exploring the possibility of restoring the marsh and promoting land conservation practices around it in 1999. Initially the Service proposed establishing a national wildlife refuge that was to be named after Aldo Leopold, a renowned ecologist whose *A Sand County Almanac* is based on his observations of wildlife and habitat at "the shack," a small cabin that still stands within a few miles of the Fairfield Marsh. Before establishing the refuge, the Service was required to perform an environmental assessment under the National Environmental Policy Act (NEPA) to identify potential effects of its actions. The study evaluated alternatives ranging from no action to establishing a national wildlife refuge.

A decision on establishing a refuge was suspended in December 1999, however, after a group consisting of landowners, elected officials, and representatives of conservation organizations asked for an opportunity to explore alternatives for restoration and conservation in the area. The group, Farming and Conservation Together (FACT), submitted its plan in September 2000. Earlier this year the Fish and Wildlife Service revised its environmental assessment to include a new Fairfield Marsh Conservation Partnership alternative that incorporates ideas from the FACT plan. The Service's Midwest Regional Director, Bill Hartwig, recently signed a Finding of No Significant Impact, marking the official approval of the revised environmental assessment. The Partnership proposal does not include land purchases for a national wildlife refuge; however, the Service adopted the FACT committee's recommendation to retain the landowner option to sell lands for federal waterfowl production areas. The Service will also partially fund a coordinator position for 1 year and promote landowner participation in its existing Partners for Fish and Wildlife program. For more information contact Steve Lenz at (920) 387-0336 x15, e-mail: [steve\\_lenz@fws.gov](mailto:steve_lenz@fws.gov) or Jim Ruwaldt at (608) 221-1206 x14, e-mail: [james\\_ruwaldt@fws.gov](mailto:james_ruwaldt@fws.gov). *If you are part of an innovative community-based partnership that is working to restore river corridors or wetlands, we'd like to hear from you. Please send a short description of your partnership to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

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## Funding for Restoration Projects

### **Watershed Assistance Grant Criteria and Application Available**

The Watershed Assistance Grants (WAG) program supports the growth and sustainability of local watershed partnerships in the United States. Partnerships meeting stated criteria are eligible for grants of up to \$30,000. Proposals must be postmarked by **July 20, 2001**. For more information, visit [www.rivernetwork.org/howwecanhelp/howwag\\_2001cri.cfm](http://www.rivernetwork.org/howwecanhelp/howwag_2001cri.cfm), call (503) 241-3506 x47, or e-mail [wag@rivernetwork.org](mailto:wag@rivernetwork.org).

### **North American Wetlands Conservation Act Standard Grant Deadline Nears**

The North American Wetlands Conservation Act of 1989 provides matching grants to carry out wetlands conservation projects in the United States, Canada, and Mexico. The act was passed, in part, to support activities under the North American Waterfowl Management Plan. This plan is an international agreement between the three countries for the long-term protection of wetland/upland habitats on which waterfowl and other migratory birds in North America depend. Both the Standard Grant and Small Grant programs help deliver funding to on-the-ground projects for the protection, restoration, or enhancement of an array of wetland habitats. Eligible applicants include public or private, profit or nonprofit entities or individuals establishing public-private sector partnerships.

Applications are due each year on the last Friday in July for Standard Grants (\$50,000 to \$1 million) and on the first Friday in December for Small Grants. However, proposals may be submitted at any time, and early submissions are encouraged. For more information on Standard Grant proposals, contact David Buie ([david\\_buie@fws.gov](mailto:david_buie@fws.gov)) at (301) 497-5870, or Bettina Sparrowe ([bettina\\_sparrowe@fws.gov](mailto:bettina_sparrowe@fws.gov)) at (703) 358-1896, at the U.S. Department of the Interior, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, Room 110, Arlington, VA 22203.

*Please send any news you have on funding mechanisms available to local community organizations to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

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## News and Announcements

### Planet's Coastal Zone Endangered

According to a new report released by the World Resources Institute (WRI), continued modification and destruction of the planet's coastal zone will diminish the zone's capacity to provide fish, protect homes and businesses, reduce pollution and erosion, and sustain biological diversity. The report, *Pilot Analysis of Global Ecosystems (PAGE): Coastal Ecosystems*, analyzes quantitative and qualitative information and develops selected indicators of the condition of the world's coastal ecosystems and marine fisheries. Specifically, the study looks at measures that show the degree of human modification of the coastal zone and what we know concerning five important goods and services provided by coastal ecosystems: filtering of water, food, biodiversity, shoreline stabilization, and tourism.

"Unless things change very quickly, the world's coastal areas face a grim future. Many important coastal habitats like lagoons, wetlands, mangroves, and coral reefs are disappearing," says Jonathan Lash, WRI president. This report, along with similar studies on agricultural lands, forests, freshwater, and grasslands, constitutes the first comprehensive analysis of the world's ecosystems. The complete report is available on-line at

[http://www.wri.org/press/page\\_coast\\_pr.html](http://www.wri.org/press/page_coast_pr.html) or can be ordered for \$20 from World Resources Institute, P.O. Box 4852, Hampden Station, Baltimore, MD 21211; phone: (800) 822 0504; e-mail: [publications@wri.org](mailto:publications@wri.org).

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## ***Upcoming Conferences and Events:***

### **NEW LISTINGS:**

#### **Second Symposium on Marine Conservation Biology**

**June 21-26, 2001**

#### **San Francisco State University**

The Marine Conservation Biology Institute (MCBI) will hold the Second Symposium on Marine Conservation Biology in San Francisco, California. Major funding for this event comes from the Pew Charitable Trusts and the David and Lucile Packard Foundation. Cosponsors include the Society for Conservation Biology, the President's Council on Environmental Quality and the U.S. Department of the Interior. The Second Symposium will focus on issues on protecting, restoring and sustainably using biodiversity in the world's estuaries, coastal waters, enclosed seas and open oceans. Further information about the symposium and registration materials can be found at <http://www.mcbi.org/>.

#### **The Society for Ecological Restoration 13th Annual International Conference: Restoration Across Borders**

**October 4-6, 2001**

#### **Niagara Falls, Ontario, Canada**

The Society for Ecological Restoration will host their conference dealing with restoration issues which have worldwide applications. Topics covered in the conference will include: restoration and recovery in the Great Lakes, restoration issues on private and public lands, partnerships in restoration, invasive species control and river and riparian restoration. For more information, contact [ser2001@niagarac.on.ca](mailto:ser2001@niagarac.on.ca) or call (905) 641-2252 x4473 and ask for AI.

*To post your restoration news and announcements, please send information to*

*[restorationupdate@tetratech-ffx.com](mailto:restorationupdate@tetratech-ffx.com).*

### **PREVIOUS LISTINGS:**

#### **Coastal and Estuarine Wetland Restoration in the New Millennium**

**June 18-21, 2001**

#### **Baton Rouge, LA**

The overall goal of this conference, conducted by the Institute for Wetland Science and Public Policy, Association of State Wetland Managers, is to improve the effectiveness of coastal and estuarine wetland restoration in the new millennium. The conference includes a 2½ -day symposium and a ½-day workshop focusing on the regulation of "isolated" wetlands. For more

information, see [www.aswm.org/meeting/coastal01.htm](http://www.aswm.org/meeting/coastal01.htm) or contact the Institute for Wetland Science and Public Policy, Association of State Wetland Managers, P.O. Box 269, Berne, NY 12023-9746. Phone: (518) 872-1804; fax: (518) 872-2171; e-mail: [aswm@aswm.org](mailto:aswm@aswm.org).

### **Managing River Flows for Biodiversity: A Conference on Science, Policy and Conservation Action**

**July 30-August 2, 2001**

**Fort Collins, Colorado**

Sponsored by American Rivers, The Nature Conservancy, and other nonprofit organizations and federal resource agencies, this conference addresses the challenges of protecting natural river flows as competing demands for water increase. Participants will benefit from new information, tools, and networking opportunities to advance flow restoration and protection goals. For more information, visit [www.freshwaters.org/conference](http://www.freshwaters.org/conference) or contact Jamie Mierau, American Rivers, at e-mail: [jmierau@americanrivers.org](mailto:jmierau@americanrivers.org).

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## **Restoration-Related Web Sites**

[www.ser.org/](http://www.ser.org/)

### ***Restoration Experts Directory***

This searchable database contains contact information for local, regional, national and international individuals, organizations, agencies and companies involved in ecological restoration. The database has been developed over the last several years by the Society for Ecological Restoration.

<http://www.tpwd.state.tx.us/wetlands/programs/landowner/index.htm>

### ***Wetlands Assistance Guide for Landowners***

The Wetlands Assistance Guide for Landowners is a comprehensive guide to federal, state and private programs offering technical and/or financial assistance to private wetland owners within the State of Texas.

[www.wetlandsbank.com](http://www.wetlandsbank.com)

### ***Wetlandsbank, Inc.***

Wetlandsbank, Inc. has effectively pioneered entrepreneurial wetland mitigation banking and it has demonstrated that environmental protection and stewardship of our wetland resources and responsible economic development can harmoniously coexist. The Wetlandsbank team is constantly seeking and evaluating new opportunities in locales where environmental concerns, developmental activity and demand properly coalesce, creating a need for restoration and conservation. Wetlandsbank welcomes partnerships with public, private and non-profit owners of land suited to wetland mitigation banking.

[www.wetlandtraining.com/](http://www.wetlandtraining.com/)

**Wetland Training Institute.** Wetland Training Institute, Inc. (WTI) provides training in wetland delineation, soils and hydrology, wetland construction and restoration, nationwide permits, plant identification, mitigation banking concepts, and other riparian resource conservation issues.

*Let us know about your restoration-related web site. Please send relevant URLs to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

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## Information Resources

### **Wetlands Journal (June 2001 Issue, Vol. 21, No. 2)**

Issued by Society of Wetland Scientists

Abstracts are now available on-line ([www.sws.org/wetlands/toc/TOCV21n2.html](http://www.sws.org/wetlands/toc/TOCV21n2.html)) for the Society of Wetland Scientists' Journal, *Wetlands*.

### **Plant It Right: Restoration Planting Techniques (Video and Fact Sheet)**

Published by the Washington State University Cooperative Extension

This 17-minute video (VT0113) uses youth volunteers to demonstrate how to properly plant vegetation for streamside planting projects. A 2-page fact sheet covering the same information accompanies the video. Both the video and the fact sheet are available for download at <http://wawater.wsu.edu>. To order hard copies, contact the WSU Cooperative Extension Bulletin Office at (800) 723-1763. Cost per copy is \$30.90 (includes shipping).

### **Conference Abstracts Available**

Abstracts are now available on-line ([www.aswm.org/quebec/](http://www.aswm.org/quebec/)) from the *Wetlands and Global Climate Change at Québec 2000 - Millennium Wetland Event*, held August 6-12, 2000, in Quebec City, Quebec, Canada. The mission of the conference was to foster the understanding and sustainability of the World's peatlands and wetlands. Many papers focus on wetlands and global climate change.

*If you'd like to publicize the availability of relevant information resources, please send information to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*